

CLAIMS

1. An add/drop node to be connected in an optical WDM-network, the network including two optical fiber paths for letting light of a plurality of channels propagate in opposite directions in the network, **characterized** by two add/drop modules for each of the channels, each add/drop module comprising an add device for adding light to a first one of the two optical fiber paths and a drop device for deflecting a portion of light from a second one of the two optical fiber paths different from the first one and all add/drop modules having the same construction.

2. An add/drop node according to claim 1, **characterized in** that the add/drop modules are arranged in two sets, the add/drop modules of a first one of the two sets having their add devices connected in the first one of the two optical fiber paths and their drop devices connected in the second one of the two optical fiber paths and the add/drop modules of a second one of the two sets different from the first one having their add devices connected in the second one of the two optical fiber paths and their drop devices connected in the first one of the two optical fiber paths.

3. An add/drop node according to claim 2, **characterized in** that in each of the two sets the add/drop modules are placed at the sides of each other, and that for two adjacent add/drop modules an output of the add device in a first one of the two adjacent add/drop modules is connected to an input of the add device in a second one of the two adjacent add/drop modules.

4. An add/drop node according to claim 2, **characterized in** that in each of the two sets the add/drop modules are placed at the sides of each other, and that for two adjacent add/drop modules an output of the drop device in a first one of the two adjacent add/drop modules is connected to an input of the drop device in a second one of the two adjacent add/drop modules.

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Aa 5. An add/drop node according to any of claims 2 - 4, **characterized in** that in each of the two sets the add/drop modules are placed at the sides of each other to form inner add/drop modules and two end add/drop modules in each set, the end add/drop modules having an add/drop module of the set on only one side, and that for one of the two end add/drop modules of a first one of the two sets its drop device has an output connected to an input of the add device of one of the two end add/drop modules in a second one of the two sets and that for said one of the two end add/drop modules of the second one of the two sets its drop device has an output connected to an input of the add device of said one of the two end add/drop modules in the first one of the two sets.

35 6. An add/drop node according to any of claims 1 - 5, **characterized in** that each add/drop module comprises a house enclosing the add device and the drop device of the add/drop module, a first fixed connector attached to the house for connection in the first one of the two optical fiber paths and a first optical fiber extending freely from the house and having a first free connector at its free end to be attached to the fixed connector of a

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neighbouring add/drop module for continuing the first path through the considered add/drop module to the neighbouring module, and a second fixed connector attached to the house for connection in the second one of the two optical fiber paths and a second optical fiber extending freely from the house and having a second free connector at its free end to be attached to the fixed second connector of a neighbouring add/drop module for continuing the second path through the considered add/drop module to the neighbouring module.

7. An add/drop node according to claim 6, **characterized in that** the house includes two winding cores around which excessive fiber lengths connecting devices and connectors of the add/drop module can be wound.

8. An optical WDM-network including two optical fiber paths for letting light of a plurality of channels propagate in opposite directions in the network and at least one add/drop node connected to the two optical fiber paths, **characterized in that** the at least one add/drop module comprises two add/drop modules for each of the channels, each add/drop module comprising an add device for adding light to a first one of the two optical fiber paths and a drop device for deflecting a portion of light from a second one of the two optical fiber paths different from the first one and all add/drop modules having the same construction.

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